

land-based travellers who must rely upon pay phones to keep in touch. For decades, persons whose business requires road trips have relied upon pagers and pay telephones to keep in touch while they are in transit. With the allocation of new spectrum to air-ground service for use on commercial airlines, there will now be "pay phones" in the sky. A corollary paging service is needed to encourage the most efficient use of this airborne communications capability.

6. This need cannot be fulfilled by any existing allocation. Local paging channels have been assigned on a patchwork basis which renders impossible efficient nationwide signalling. And, the existing nationwide paging systems have been configured and networked in a manner designed to provide terrestrial service, and incidental local service, not satellite-controlled simulcast nationwide service to aircraft. A GAP system can and should be specially engineered to provide efficient coverage above the horizon with transmitter spacing designed to cover air routes efficiently and effectively. An allocation specifically devoted to this important communication need is required.

### III. Allocation Requirements

7. Three principles must be taken into consideration in allocating spectrum to GAP. First, the Commission must consider the geographic scope to be covered by a GAP license. Second, a determination must be made regarding channel spacing.

Third, the number of competing licenses that will be granted must be taken into consideration. With these considerations in mind, the Commission must determine the best source of spectrum for this necessary and innovative service. These matters are discussed in greater detail below.

#### **A. Geographic Scope of the License**

8. GAP is an inherently nationwide service. The essence of the service is to enable a ground-based individual to locate and communicate with a person who is airborne wherever he or she may be. This requires a network that covers the entire United States, and one which is operated on a centralized, integrated basis.

9. As conceived by PacTel, a GAP system will consist of numerous paging transmitters located throughout the United States. The paging transmitters will be controlled via a satellite control system which will ensure that all pages will be simultaneously transmitted. One central paging terminal will provide the batching of paging calls for the entire country. Technologically and economically, this service can be best provided if each authorized provider of service receives a nationwide license.

10. Notably, PacTel's reasoning regarding the geographic scope of the license recently was recognized by the Commission in the course of its allocation of the

849-851/894-896 MHz bands to air-ground radio telephone service. The Commission noted:

[N]ationwide systems are preferable to regional systems for the air-ground service....[T]he air-ground service is inherently nationwide in scope as many airlines today serve large portions of the United States rather than a single region. Indeed, any attempt to regionalize the air-ground service would be arbitrary. Second, regional systems could unnecessarily create problems for air-ground licensees and expenses for the users. For instance, frequency and billing coordination would be required between different service vendors. Such coordination is much easier, and much cheaper, within a single system. Further, regionalization would necessitate our developing uniform equipment standards. This would only delay the implementation of additional service to the public as the installation of additional equipment would certainly cease pending the development of technical equipment standards.

5 FCC Rcd 3861 at para. 63. All of the foregoing arguments apply with equal or greater force to GAP. Thus, PacTel proposes that spectrum allocated to GAP provide for the issuance of nationwide licenses. As is discussed in greater detail below, a license of this nature can and should be coupled with affirmative requirements that the licensee construct a sufficient number of ground station facilities to establish a nationwide service in a prompt time frame.

## B. Spectrum Needs

11. Generally, the paging industry has developed utilizing a 25 KHz channel spacing standard. Significant benefits would accrue by maintaining this channel spacing with respect to GAP. First, and foremost, doing so will enable existing state-of-the-art paging technology to be applied to GAP. This has substantial benefits in terms of the lead time required to establish the service, and the cost and reliability of the equipment.

12. As the Commission is aware, conventional terrestrial paging services are offered on a variety of channels in various frequency bands (e.g., 35 MHz, 43 MHz, 150 MHz, 450 MHz, 900 MHz). In seeking to accommodate GAP, the key is to locate frequencies capable of being allocated on a nationwide basis for this service. The logical candidates would appear to be 930-931 MHz and/or 940-941 MHz, both of which are presently held as reserve spectrum. Recognizing that the Commission must balance this request for a spectrum allocation against other pending and potentially competing requests, PacTel Paging will defer to the Commission regarding its preference from among these bands for this allocation.

13. Notably, much of the developmental work respecting one-way messaging services, is in fact focusing on 900 MHz equipment. Consequently, an allocation to GAP from either the 930-931 MHz or 940-941 MHz bands would enable this

innovative new service to benefit from ongoing technological advances in the state of the one-way messaging art.<sup>2/</sup>

### C. Number of Licenses

14. Experience in the radio common carrier industry clearly establishes the benefits of competition. This principle has been resoundingly reaffirmed in the Commission's recent Report and Order allocating additional spectrum to the air-ground radio telephone service. The Commission noted:

Historically, the Commission has favored competition whenever feasible. Competition helps to ensure that rates are reasonable and that the motivation exists for licensees to use new technologies in order to prove their systems....[W]e are convinced that only the existence of competitive terrestrial air-ground systems can produce the lowest prices and highest quality service to domestic airline passengers.

5 FCC Rcd. 3861 at para. 61.

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<sup>2/</sup> For Example, PacTel Paging is itself a proponent of "Advanced Architecture Paging", a high speed, digital data stream to be offered to subscribers free from traditional internal formatting and composition constraints. AAP will provide a technological platform upon which many advanced messaging services might be provided including enhanced messaging capabilities, low and high resolution graphics, video, E-Mail, facsimile and digitized voice. While PacTel Paging is testing the possibility of utilizing channel spacing of greater than 25 KHz for AAP -- which would preclude its use for GAP as here proposed -- there may, nonetheless, be technological improvements in the state of the paging art developed in connection with AAP which can be successfully applied to GAP.

15. While the decision to opt in favor of competitive systems is relatively easy, determining the number of licensees is always more difficult. While there are instances in which the Commission has determined that the licensing of two facility-based competing systems is sufficient, such as in the cellular services, these decisions appear to be motivated in part by the fact that the relatively high spectrum requirement of each system precluded the licensing of more than two systems.

16. PacTel recommends that three nationwide channels be set aside for GAP. This recommendation is made, taking into consideration, the capacity of each channel in comparison to the projected user population. The result of granting three licenses would be, in PacTel Paging's view, an allocation which will result in robust competition to the benefit of subscribers.

#### **D. Height/Power**

17. PacTel recommends that height/power limits for GAP conform to existing standards for 931 MHz nationwide paging frequencies under Part 22 of the rules. See FCC Rules, Section 22.505(c)(2).

#### **IV. Licensing Standards**

18. In making an allocation of spectrum from the reserve band, the Commission must give consideration to the licensing standards that will be utilized. PacTel Paging has

given this matter considerable thought, and proposes the following:

**A. Regulatory Status**

19. In National Association of Regulatory Utilities Commissioners v. FCC, 525 F. 2d 630, 641 (D.C. Cir. 1976), the court stated, inter alia, that "to be a common carrier one must hold oneself out indiscriminately to the clientele one is suited to serve". The court also has stated that a "second prerequisite to common carrier status...is the requirement...that the system be such that customers transmit intelligence of their own design and choosing". 533 F.2d 601, 609 (D.C. Cir. 1976). In view of these directives, GAP would appropriately be regulated as a common carrier service. The fundamental purpose of the allocation would be to create a nationwide system available to all prospective users on a non-discriminatory basis to meet their communications needs. For the same reasons that the Commission recently determined to regulate the expanded air-ground radio telephone service allocation as a common carrier service, GAP should be accorded common carrier status.

20. The Commission should, however, forbear from applying the full panoply of common carrier regulations to GAP. As earlier noted, the service can and should be authorized on a competitive basis, thereby rendering GAP providers non-dominant. Applying the reasoning in the

Commission's Competitive Carrier Rulemaking, 85 FCC 2d 1, 10 (1980), GAP should be subject to reduced and/or streamlined regulation. If GAP providers are deemed required to file rates with the Commission for interstate services, such filings should be subject to a presumption of lawfulness, expedited review procedures, and should not require cost justification material. See, e.g., Fifth Report and Order, 98 FCC 2d 1191, 1192 (1984).

21. Additionally, because GAP will largely be an interstate communications service which could be jeopardized if it was subject to a patchwork of state regulations, the Commission should assert exclusive jurisdiction with respect to this service. Consequently, the Commission should preempt not only technical and operational standards, but also state or local rate and entry/exit regulations with respect to the nationwide service. This would not necessarily preclude state regulation of any incidental services that might be offered.

**B. Qualifying Criteria  
To Be A GAP Licensee**

22. Applicants seeking licenses as GAP service providers should be required to meet three qualifying criteria: (1) financial qualifications, (2) technical qualifications, and (3) service commitments. Regarding financial qualifications, applicants should be required to



demonstrate that they have the financial resources needed to construct and operate a nationwide air-ground system. Unlike traditional paging services which can be implemented on a local basis with a relatively small capital investment, the provision of nationwide air-ground service will require a substantial commitment of capital. Also, because the number of licenses to be issued will be limited, the Commission and the public can ill-afford to have this precious spectrum assigned to entities that are not financially secure. PacTel recommends that applicants be required to provide full particulars regarding the costs of construction and operation of the proposed facilities, together with other initial expenses. Drawing upon experience in the cellular arena, firm financial commitments should be required in order to assure that applicants have the seriousness of purpose and intent to provide the proposed services. See, e.g., FCC Rules, Section 22.917.

23. As for technical qualifications, applicants should be required to provide a complete technical description of their proposed systems, along with a detailed description of their qualifications to provide the proposed services.

24. As to service availability, the Commission should adopt minimum service requirements. PacTel Paging proposes that GAP licensees be required to construct a minimum of 25 terrestrial base stations within the first 18 months of the

authorization's issuance. These ground stations should not be concentrated in any single geographic area or region, but rather should be disbursed generally throughout the United States. Thus, for purpose of meeting the minimum construction requirement, licensees should not be able to count any transmitter that is located within a certain number of miles (perhaps 250 or 300) of another terrestrial base station of the system. A standard of this nature will obligate licensees to adopt a nationwide focus as they proceed with the construction of their systems.

#### C. Selection Method

25. Exclusive radio common carrier paging licenses generally are assigned by lottery. GAP would appear to be an appropriate service for the use of random selection techniques, since the number of interested providers of service will, no doubt, exceed the number of available channels. The Commission must, however, adopt rules and procedures that will reduce speculation for these licenses. Specifically, PacTel Paging recommends that:

(a) Threshold criteria regarding financial qualifications, technical qualifications and minimum service proposal requirements must be strictly enforced;

(b) Applicants should be restricted from filing or participating in more than one application for a nationwide GAP license; and

(c) Restrictions on the alienation of a GAP authorization prior to the initiation of nationwide service must be adopted and strictly enforced. A three year holding period should be instituted.

#### **D. Additional Provisions**

26. Except as otherwise provided above, this new paging service should be subject to the provisions in Part 22 of general applicability to radio common carrier services, and to the rules governing one-way services to the extent applicable to nationwide systems.

#### **Conclusion**

The foregoing premises having been duly considered, PacTel Paging respectfully petitions the Commission to initiate a rulemaking proceeding to allocate spectrum and adopt rules for ground-to-air paging as set forth herein. By separate

filing, PacTel is requesting a Pioneer's Preference with respect to this new service proposal.

Respectfully submitted,

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## CERTIFICATE OF SERVICE

I, Sharon A. Powell, a secretary in the law firm of Bryan, Cave, McPheeters & McRoberts, hereby certify that on this 30th day of July, 1991, copies of the foregoing "PETITION FOR RULEMAKING OF PACTEL PAGING" were hand delivered or mailed, postage prepaid, First-Class U.S. Mail, to the following:

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CERTIFICATE OF SERVICE

I, Tana C. Maples, hereby certify that on this 2nd day of August, 1991, copies of the foregoing "PETITION FOR RULEMAKING" were hand delivered, delivery charges prepaid, to the following:

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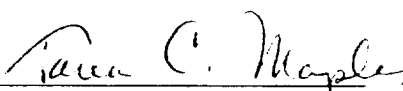
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